DISTRIBUTED TEXT-TO-SPEECH SYNTHESIS BETWEEN A TELEPHONE NETWORK AND A TELEPHONE SUBSCRIBER UNIT

ABSTRACT OF THE DISCLOSURE

A telecommunications system (600) distributes text-to-speech synthesis (900) between a telephone network (603) and a telephone subscriber unit (602). The telephone network (603) receives (1102) a telephone call from a first telephone subscriber unit (601) over a first communication channel (604) intended for a second telephone subscriber unit (602), determines (1103) that the second telephone subscriber unit (602) subscribes to a speech-based caller identification service provided by the telephone network (603), converts (1107) text information (707), representing the caller identification of the first telephone subscriber unit (601) into symbols (708), encodes (1108) the symbols (708) to form a data stream (709), opens (1109) a second communication channel (605) between the telephone network (603) and the second telephone subscriber unit (602), and sends (1110) the data stream (709) to the second telephone subscriber unit (602) over the second communication channel (605). The second telephone subscriber unit (602) detects (1202) that the telephone network (603) opened the second communication channel (605), receives (1203) the data stream (807) from the telephone network (603), decodes (1206) the data stream (807) to form decoded symbols (808), converts (1207) the decoded symbols (808) to form a speech waveform (809), and generates (1211) speech from the speech waveform (809) to permit a second party associated with the second telephone subscriber unit (602) to listen to the speech to identify an identity of a first party associated with the first telephone subscriber unit (601) prior to accepting the telephone call from the first telephone subscriber unit (601). The symbols (708) may be generated at various points (909, 910) within the distributed text-to-speech synthesizer (900) depending on the requirements and limitations of the telecommunication system (600).